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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,867	01/25/2002	Chien-Hsing Fang	FANG3008/EM	8546

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EXAMINER

PHAN, THO GIA

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,867

Applicant(s)

FANG, CHIEN-HSING

Examiner

Tho G. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 1-6,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification and the claims.

Claim Rejections - 35 USC § 112

1. Claim 3 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, line 2, the language, "said conducting plate" lacks a proper antecedent basis.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 1-2, 4-5 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen (6,407,715).

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Chen in figures 2-4 discloses a dual band antenna comprising a conducting surface 22 for radiating and receiving electromagnetic signals and having a first cutout part 37 and a second cutout part 39, the first cutout part having a length for producing electromagnetic resonance at a first frequency range, and the second cutout part having a length for producing electromagnetic resonance at a second frequency range, a feed point 26 connected with the conducting surface around the first cutout part for feeding signals of the first frequency range to the first cutout part and for feeding signals of the second frequency range to the second cutout part (see column, lines 15-41) and a feed line connected with the conducting surface at the feed point for feeding signals to the dual band antenna, a horizontal portion of the first cutout part and a horizontal portion of the second cutout part elongate substantially in the same direction on the conducting surface (see figure 3).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 3, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Cassel (5,600,337).

Chen has been discussed above but fails to show the first cutout part is on a deflected portion relative to the second cutout part and a grounding location formed on the conducting surface around the first cutout part whereby the coaxial cable is grounded. However, Cassel in figures 3-4 and 8 discloses the first cutout part 10 is on a deflected portion relative to the second cutout part 12 and a grounding location (at the edge of plate 14) formed on the conducting surface around the first cutout part whereby the coaxial cable is grounded. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to employ the the first cutout part is on a deflected portion relative to the second cutout part and a grounding location formed on the conducting surface around the first cutout part whereby the coaxial cable is grounded as taught by Cassel for the purpose of improving the grounding of the antenna, and therefore improving the antenna gain.

Allowable Subject Matter

6. Claims 11-12 are allowed.

7. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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8. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

None of the reference discloses a fixation structure disposed on the conducting surface around the grounding location, the structure having a recess receiving the cable for providing precise fixation and grounding of the cable and the first cutout part is rectangular and the second cutout part is trapezoidal.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patents to Gegan, Warnagiris et al, Pereda, Becker and Honda et al are cited as of interest and illustrate a similar structure to a dual band slot antennas assembly.

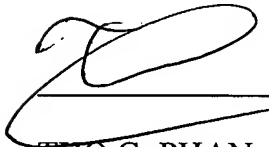
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner THO G. PHAN whose telephone number is (703) 308-3051.

11. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

12. Papers related to Technology Center 2800 applications **only** may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be

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considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.



THO PHAN
PRIMARY EXAMINER

THO G. PHAN

Patent Examiner

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April 17, 2003